

Page 31, line 31, strike "46" and insert --40--.

Page 33, line 2, delete "not shown", and insert therefor --such as temperature sensor 20--.

Page 33, line 4, delete "not shown" and insert therefor --such as temperature sensor 21--.

**IN THE CLAIMS:**

Please cancel claims 1-34 without prejudice and add the following new claims 35-58.

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D1  
A1

--35. A control system for a water spa intended to remain substantially continuously filled between uses, comprising:

- an electrical power source for providing energy;
- a system interconnection panel in communication with the power source, the system interconnection panel including a step-down power supply and a microcomputer; and
- a plurality of electronic and electrical components connected to the system interconnection panel, including an electronic control panel capable of displaying alphanumeric characters calculated by the microcomputer--.

--36. The spa control system of claim 35, wherein the step-down power supply included with the interconnection panel converts energy supplied by the power source into a lower power and a lower voltage as required by one or more of the electronic components connected thereto--.

--37. The spa control system of claim 35, wherein the spa control system is intended for use on an outdoor spa vessel--.

A1  
--38. The spa control system of claim 37, wherein a Ground Fault Circuit Interrupter (GFCI) is connectively interposed between the electrical power source and the system interconnect panel--.

--39. The spa control system of claim 35, wherein one of the electrical components is a heating element, and another of the electrical components is a pump--.

--40. The spa control system of claim 39, wherein the heating element is an electrical resistive heating element and operates to heat water held by the spa--.

--41. The spa control system of claim 35, the spa control system further comprising an electronic circuitry associated with the microcomputer and being capable of converting analog signals to engineering units expressed as alphanumeric characters--.

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C1  
--42. The spa control system of claim 35, the spa control system further including at least one electronic solid state temperature sensor to measure the temperature of water in the spa, and a second electronic sensor to measure another parameter of water in the spa--.

--43. The spa control system of claim 42, wherein the temperature sensor produces an electronic signal proportional to the temperature of water in the spa, and the second sensor produces an electronic signal indicative of presence or absence of water flow--.

--44. The spa control system of claim 43, wherein the microcomputer converts the electronic signals proportional to temperature to engineering units using a curve fitting algorithm--.

--45. The spa control system of claim 44, wherein the microcomputer is capable of displaying the temperature in alphanumeric engineering units on the control panel--.

--46. The spa control system of claim 43, wherein an error message is displayed on the control panel in alphanumeric characters when lack of water flow is detected by the second sensor--.

--47. A water spa for bathing, comprising:  
a vessel for holding water and intended to remain substantially continuously filled between uses;  
a control system for a water spa intended to remain substantially continuously filled between uses, comprising:  
an electrical power source for providing energy;

a system interconnection panel in communication with the power source, the system interconnection panel including a step-down power supply and a microcomputer; and

a plurality of electronic and electrical components connected to the system interconnection panel, including an electronic control panel capable of displaying alphanumeric characters calculated by the microcomputer--.

--48. The water spa for bathing of claim 47, wherein the step-down power supply included with the interconnection panel converts energy supplied by the power source into a lower power and a lower voltage as required by one or more of the electronic components connected thereto--.

--49. The water spa for bathing of claim 48, wherein the water spa is intended for outdoor use--.

--50. The water spa for bathing of claim 47, wherein a Ground Fault Circuit Interrupter (GFCI) is connectively interposed between the electrical power source and the interconnect panel--.

--51. The water spa for bathing of claim 47, wherein one of the electrical components is a heating element, and another of the electrical components is a pump--.

--52. The water spa for bathing of claim 51, wherein the heating element is an electrical resistive heating element and operates to heat water held by the spa--.

--53. The water spa for bathing of claim 47, wherein the spa control system microcomputer and associated electronic components are capable of converting analog signals to engineering units expressed as alphanumeric characters--.

--54. The water spa for bathing of claim 47, wherein the spa control system further including at least one electronic solid state temperature sensor to measure the temperature of water in the spa, and a second electronic sensor to measure another parameter of water--.

--55. The water spa for bathing of claim 54, wherein the temperature sensor produces an electronic signal proportional to the temperature of water in the spa, and the second sensor produces an electronic signal indicative of presence or absence of water flow--.

--56. The water spa for bathing of claim 54, wherein the microcomputer converts the electronic signals proportional to temperature to engineering units using a curve fitting algorithm--.

--57. The water spa for bathing of claim 56, wherein the microcomputer is capable of displaying the temperature in alphanumeric engineering units on the control panel--.